M-Bond Adhesive Resin Cement (Project 02-05) (1/03)

M-Bond is a self-cured, two-part (powder/liquid), methacrylate-type resin cement that is provided with a self-etching bonding agent. It is recommended by its manufacturer for the luting of:

- -metal inlays, onlays, crowns, and fixed partial dentures
- -all-ceramic/porcelain inlays, onlays, crowns, veneers, and fixed partial dentures
- -all-resin inlays, onlays, crowns, and fixed partial dentures
- -cast and prefabricated posts
- -resin-bonded fixed partial dentures (i.e., "Maryland" bridges)



Nonluting uses of M-Bond include repairing fractured metal-ceramic restorations and temporary fixation of mobile teeth. M-Bond comes in two shades (Clear and Ivory), both of which are included in the kit. The product is packaged in a compact paper box with a flip-open lid; written instructions are provided in a multi-language paper sheet and a booklet.

Manufacturer:

Tokuyama Dental Corp. 38-9, Taitou 1-chome Taitou-ku Tokyo, Japan

Distributor:

J. Morita 9 Mason Irvine, CA 92618 (888) 566-7482 (949) 581-9600 (949) 465-1095 FAX www.jmoritausa.com

Suggested Retail Price:

\$240.00 M-Bond Adhesive Resin Cement Kit (item number 26-17301) contains:

- -one 4-g bottle of Clear Powder
- -one 4-g bottle of Ivory Powder
- -one 8-mL bottle of Liquid
- -one 3-mL bottle of Primer A
- -one 3-mL bottle of Primer B
- -mixing well
- -accessories

Government Price

\$144.00 M-Bond Kit (item number and contents as listed above)

ADVANTAGES:

- + Working time is long enough to allow users to mix and use the cement without hurrying.
- + Setting time is appropriate.
- + Easy to clean excess cement from margins.
- + No post-cementation sensitivity reported during clinical-user evaluation.
- + Provided with a very easy-to-use self-etching primer for preparation treatment.

- + Expiration dates and lot numbers are provided for all items in kit.
- + Summary instructions are on inside cover of product box.
- + Recommended storage temperature range is given on box.
- + Material Safety Data Sheet (MSDS) is included in kit.

DISADVANTAGES:

- Kit does not contain components necessary for all types of cementation.
- Film thickness is considerably greater than that of other resin cements evaluated by DIS.
- Has insufficient degree of radiopacity.
- Powder and liquid are messy to mix.

SUMMARY AND CONCLUSIONS:

M-Bond was reported by the clinical users to have an appropriate viscosity, and is easy to mix, handle, and clean up. Because it is in powder/liquid form, it is a bit messier to mix that most resin cements, which come as two pastes. M-Bond has a generous working time but sets relatively quickly in the mouth. The cement is provided with well-written instructions, and its two shades were judged to be adequate for the majority of cases treated during the evaluation. It lacks radiopacity, though, which will make the cement difficult to radiographically detect. It also has a greater film thickness than other resin cements evaluated by DIS. M-Bond's main disadvantage, however, is that it does not come with two important primers that are required for proper cementation of noble-metal, all-ceramic, and all-resin restorations. Although the product handles well and has several useful features, the kit's lack of completeness limits the cement's usefulness. As a result, **M-Bond** is rated **Marginal** for use by the federal dental services.